



Lesson Plan

Title of Lesson: Graphing Lucky Charms		Date: 6/15/2010
Author(s): Mary Koch		Timeframe of Lesson: 1 or 2 days
Subject Area(s): Mathematics		School District: St. Francis Campus: Willow Glen Primary School
		Grade Level(s)/Course: K5
Wisconsin Model Early Learning Standards <u>Mathematical Thinking</u> B.EL.1 Demonstrates understanding of numbers and counting B.EL.2 Understands operations and relationships B.EL.6 Collects, describes and records information using all the senses Wisconsin Model Academic Standards: <u>Mathematics</u> A.4.2. Communicate mathematical ideas in a variety of ways, including words, numbers, symbols, pictures, charts, graphs, tables, diagrams, and models. E.4.1 Work with data in the context of real-world situations E.4.2 Describe a set of data	Subject Specific: <i>St. Francis School District K5 Math Learning Targets</i> Statistics and Probability Collect, organize, represent and describe data using simple surveys to answer questions, and predict likelihood of events. Technology Specific: <i>Wisconsin Model Academic Standards for Technology</i> A.4.5 Use media and technology to create and present information A.4.6 Evaluate the use of media and technology in a production or presentation	
Stated Objective(s) Include the focused Instructional Strategy – see chart on page 13.	<ul style="list-style-type: none">• Students will sort and create an individual graph of the number of each kind of marshmallows they had in their bag of Lucky Charms cereal.• Students will create a class graph of marshmallow data on the dry-erase board.• Students will create a class graph of marshmallow data using the NCES create-a-graph application.• Students will compare the dry-erase board graph with the computer created graph and analyze the advantages and disadvantages of each kind of graph creation. The focused instructional strategy for all these objectives is non-linguistic representation of information.	

Procedures for Lesson	<ul style="list-style-type: none"> • Distribute graphing sheets and cereal to each student. • Allow students time to sort their cereal and graph the results for their individual bag of cereal. • When students are finished with their graph, they should record their individual results on the class data table. • Small groups of students will use popsicle sticks to determine the total number of each kind of marshmallow (this authentic task provides opportunities to practice regrouping with ones and tens) • With the assistance of the teacher, the students will create a graph on the large dry-erase board, showing the class results. • With the assistance of the teacher, students will create a bar graph using the NCES create-a-graph application. • Students will compare the graph on the dry-erase board with the computer-generated graph and discuss the pros and cons of that method of graphing – students will share their ideas with a partner, then come together for a whole class discussion.
Assessment or Evaluation	<p>Students will be evaluated on the following criteria:</p> <ul style="list-style-type: none"> • student accurately sorted all marshmallows into groups • student accurately completed the graph • student accurately recorded his/her individual data on the class data form • student contributed to the discussion when creating the class graph on the dry-erase board • student contributed to the discussion when creating the class graph on the computer • student contributed one idea to the discussion when comparing the two graphs during the whole-group discussion
Enrichment	<p>To extend this lesson, students can work in small groups (with teacher support) to use the create-a-graph app and graph other kinds of data.</p> <p>Students can also use the same data set and create a bar graph, a pie chart, and then compare the two kinds of graphs.</p>
Materials	<p><u>Technology Resources:</u></p> <p>NCES for Kids, Create-a-graph application</p> <p>http://nces.ed.gov/nceskids/createagraph/</p>

	<p>Computer Smartboard or projector</p>
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Other Resources:

1 bag Lucky Charms cereal for each child (approx 1 cup)

Lucky Charms graphing sheet – 1 for each child
www.teachingheart.net/luckycharmfile.doc

Large chart paper to gather data from each student

Popsicle sticks (sticks and bundles of 10)

Whiteboard & markers